

UNITED STATES PATENT APPLICATION
FOR
**METHOD AND SYSTEM FOR HARVESTING FEEDBACK AND
COMMENTS REGARDING MULTIPLE ITEMS FROM USERS OF A
NETWORK-BASED TRANSACTION FACILITY**

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**METHOD AND SYSTEM FOR HARVESTING FEEDBACK AND
COMMENTS REGARDING MULTIPLE ITEMS FROM USERS OF A
NETWORK-BASED TRANSACTION FACILITY**

FIELD OF THE INVENTION

The present invention relates generally to the field of e-commerce and, more specifically, to the harvesting of feedback information, opinions 5 and comments regarding multiple items from users of a network-based transaction facility such as, for example, an Internet-based auction facility.

BACKGROUND OF THE INVENTION

In addition to access convenience, one of the advantages offered by 10 network-based transaction facilities (e.g., business-to-business, business-to-consumer and consumer-to-consumer Internet marketplaces and retailers) and on-line communities is that participants within such facilities or communities may provide feedback to the facility, to other users of the facility and to members of an on-line community regarding any number of 15 topics.

For example, an Internet-based retailer may provide a feedback mechanism whereby customers may provide feedback, in the form of comments or opinions, regarding goods or services offered for sale by the retailer. An Internet-based bookstore may, for example, provide a feedback 20 mechanism whereby comments or opinions regarding particular books may be submitted via a web site operated by the book retailer. Such comments

are then displayed within a web page, pertaining to the relevant book, generated by the Internet-based book retailer. Such comments and feedback are useful in assisting a purchaser with a buying decision.

For users of a network-based transaction facility, such as an Internet-based auction facility, feedback regarding other users is particularly important for enhancing user trust of the transaction facility. Indeed, a history of positive feedback for a trader that routinely uses an Internet-based auction facility may be particularly valuable and useful in providing other traders with a degree of confidence regarding a specific trader. Accordingly, a positive feedback history may establish the credibility and trustworthiness of a particular trader within an on-line trading community. Similarly, a history of negative feedback may discourage other traders from transacting with a specific trader.

SUMMARY OF THE INVENTION

According to one aspect of the present invention, a method of displaying a user interface, to harvest feedback pertaining to transactions facilitated by a computerized transaction facility, displays transaction identification information for each of the plurality of transactions within a user interface displayed on a display device. A feedback input for each of the plurality of transactions is displayed within the user interface, as displayed on the display device. Each feedback input is displayed so as to indicate an association with respect to transaction identification information.

5 Other features of the present invention will be apparent from the accompanying drawing and from the detailed description that follows.

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BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is illustrated by way of example and not limitation in the figures of the accompanying drawings, in which like references indicate similar elements and in which:

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Figure 1 is a block diagram illustrating an exemplary network-based transaction facility in the form of an internet-based auction facility.

10 **Figure 2** is a database diagram illustrating an exemplary database for the transaction facility.

Figure 3 is a diagrammatic representation of an exemplary transaction record table of the database illustrated in **Figure 2**.

15 **Figure 4** is a diagrammatic representation of an exemplary feedback table of the database illustrated in **Figure 2**.

Figure 5 is a diagrammatic representation of an exemplary feedback details table of the database illustrated in **Figure 2**.

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Figure 6 illustrates an exemplary interface sequence, according to one embodiment, that may be implemented by the transaction facility for the purposes of harvesting feedback, comments, opinions or reviews.

Figures 7A - 7B are flow charts illustrating an exemplary method of harvesting feedback, comments or reviews pertaining to transactions facilitated by a network-based transaction facility.

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Figure 8 illustrates an exemplary logon interface for accessing a feedback mechanism of the transaction facility.

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10 **Figure 9** is a flow chart illustrating an exemplary method of displaying a user interface to harvest feedback, comments and opinions pertaining to multiple items.

15 **Figure 10** illustrates an exemplary "exceeds threshold" multiple feedback interface.

20 **Figure 11** illustrates an exemplary filtered multiple feedback interface, that may follow the "exceeds threshold" interface following filtering of transactions.

Figure 12 illustrates an exemplary "does not exceed threshold" feedback interface.

Figure 13 illustrates an exemplary "confirmation" interface.

Figure 14 is an object diagram illustrating exemplary objects of the transaction facility that may be utilized to harvest multiple feedbacks, opinions or comments from users of a transaction facility.

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Figure 15 is a diagrammatic representation of a machine, in an exemplary form of a computer system, in which a set of instructions for causing the machine to perform any of the methodologies of the present invention may be executed.

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DETAILED DESCRIPTION

A method and system for harvesting feedback information, comments and opinions regarding multiple items from users of a network-based transaction facility are described. In the following description, for purposes 5 of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be evident, however, to one skilled in the art that the present invention may be practiced without these specific details.

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Terminology

For the purposes of the present specification, the term "transaction" shall be taken to include any communications between two or more entities and shall be construed to include, but not be limited to, commercial transactions including sale and purchase transactions, auctions and the like.

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Transaction Facility

Figure 1 is block diagram illustrating an exemplary network-based transaction facility in the form of an Internet-based auction facility 10. While an exemplary embodiment of the present invention is described within the context of an auction facility, it will be appreciated by those skilled in the art 20 that the invention will find application in many different types of computer-based, and network-based, commerce facilities.

The auction facility 10 includes one or more of a number of types of

front-end servers, namely page servers 12 that deliver web pages (e.g., markup language documents), picture servers 14 that dynamically deliver images to be displayed within Web pages, listing servers 16, CGI servers 18 that provide an intelligent interface to the back-end of facility 10, and search servers 20 that handle search requests to the facility 10. E-mail servers 21 provide, *inter alia*, automated e-mail communications to users of the facility 10.

The back-end servers include a database engine server 22, a search index server 24 and a credit card database server 26, each of which 10 maintains and facilitates access to a respective database.

The Internet-based auction facility 10 may be accessed by a client program 30, such as a browser (e.g., the Internet Explorer distributed by Microsoft Corp. of Redmond, Washington) that executes on a client machine 32 and accesses the facility 10 via a network such as, for example, the 15 Internet 34. Other examples of networks that a client may utilize to access the auction facility 10 include a wide area network (WAN), a local area network (LAN), a wireless network (e.g., a cellular network), or the Plain Old Telephone Service (POTS) network.

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Database Structure

Figure 2 is a database diagram illustrating an exemplary database 23, maintained by and accessed via the database engine server 22, which at least partially implements and supports the auction facility 10. The database 23

may, in one embodiment, be implemented as a relational database, and includes a number of tables having entries, or records, that are linked by indices and keys. In an alternative embodiment, the database 23 may be implemented as collection of objects in an object-oriented database.

5 Central to the database 23 is a user table 40, which contains a record for each user of the auction facility 10. A user may operate as a seller, buyer, or both, within the auction facility 10. The database 23 also includes item tables 42 that may be linked to the user table 40. Specifically, the tables 42 include a seller items table 44 and a bidder items table 46. A user record in
10 the user table 40 may be linked to multiple items that are being, or have been, auctioned via the facility 10. A link indicates whether the user is a seller or a bidder (or buyer) with respect to items for which records exist within the item tables 42. The database 23 also includes a note table 48 populated with note records that may be linked to one or more item records
15 within the item tables 42 and/or to one or more user records within the user table 40. Each note record within the table 48 may include, *inter alia*, a comment, description, history or other information pertaining to an item being auction via the auction facility 10, or to a user of the auction facility 10.

A number of other tables are also shown to be linked to the user table
20 40, namely a user past aliases table 50, a feedback table 52, a feedback details table 53, a bids table 54, an accounts table 56, an account balances table 58 and a transaction record table 60.

Figure 3 is a diagrammatic representation of an exemplary

embodiment of the transaction record table 60 that is populated with records, or entries, for completed, or ended, transactions (e.g., auctions) that have been facilitated by the auction facility 10. The table 60 includes a transaction identifier column 62 that stores a unique transaction identifier 5 for each entry, and an end date column 64 that stores a date value indicating, for example, a date on which a transaction was established. A bidder column 66 stores a user identifier for a bidder (or a purchaser), the user identifier comprising a pointer to further user information stored in the user table 40. Similarly, a seller column 68 stores, for each entry, a user identifier 10 for a seller within the relevant transaction. An item number column 70 stores, for each entry, an item number identifying the goods or service being transacted, and a title column 72 stores, for each entry, a descriptive title for the relevant transaction or for the item being transacted.

It should be noted that, in one embodiment, an entry is only created 15 in the transaction record table 60 for transactions that have been established, for example, by the conclusion of an auction process, or by some other offer and acceptance mechanism between the purchaser and the seller.

Figure 4 is a diagrammatic representation of an exemplary embodiment of the feedback table 52. The feedback table 52 stores summary 20 information regarding feedback for users of the auction facility 10. The table 52 includes a user identifier column 74 that stores, for each entry, a user identifier providing a pointer to the user table 40. A total score column 76 stores, for each user entry, a total number of feedback comments (e.g.,

negative, positive and neutral), received for the relevant user. A total negative column 78 stores, for each user entry, the total number of negative feedback comments for the relevant user, and a total positive column 80 similarly stores, for each user entry, the total number of positive feedback 5 comments received for that user. A number of retractions column 82 stores, for each user entry, the number of threads that the relevant user has retracted from auctions.

Figure 5 is a diagrammatic representation of one embodiment of the feedback details table 53, that is populated with entries reflecting the details 10 of each feedback comment or opinion submitted by a user to the auction facility 10 regarding another user or item involved in a transaction. In one exemplary embodiment, users are only permitted to provide feedback pertaining to a transaction upon conclusion of that transaction. The feedback information may pertain to a further user that participated in the 15 transaction, or to the object (e.g., goods or services) that was the subject of the transaction. In an alternative embodiment, for example, comments or opinions are provided regarding an item or service that is offered for sale or regarding an event. In these cases it will be appreciated that a transaction is necessarily required for feedback to be permitted.

20 The feedback details table 53 includes an item number column 84 including an item identifier that points to a record within the item tables 42. A comment column 86 stores, for each entry, the actual text of the feedback, comment, or opinion. A type column 88, in one embodiment, stores

indication as to whether the comment is positive, negative or neutral. A date column 90 stores, for each entry, the date on which the feedback, comment or opinion was delivered. A response column 92 stores the text of a response submitted by a user (e.g., a user to which the original comment pertained) in response to the comment text stored in column 86. Similarly, a rebuttal column 94 stores the text of a rebuttal to such a response.

A commentator column 96 stores the user identifier of the user that submitted the original comment, stored in column 86, for the entry. A commentee column 98 stores the user identifier of the user to which 10 comment may have been directed.

It will be appreciated that further dates and other descriptive information may also populate the feedback details table 53.

Multiple Feedback Items

In order to facilitate the convenient provision of feedback by users of the auction facility 10 pertaining to a transaction (e.g., an auction transaction) in which a user participated, the present invention proposes a method and system whereby a user may conveniently provide feedback pertaining to multiple transactions. By facilitating the harvesting of multiple 20 feedbacks for a multiple transaction via a unified mechanism, the invention addresses the inconvenience of tracking down multiple auctions via other indirect channels or mechanisms that may be provided by web site. In one embodiment, the present invention facilitates the provision of multiple

feedbacks pertaining to respective multiple transactions via a single interface (e.g., a markup language page interface). While the present invention is discussed within the context of providing feeding regarding transactions within a user is participated, it will readily be appreciated that the present

5 invention may be extended to providing multiple feedbacks, comments or opinions pertaining to respective multiple products, events or other entities. For example, a book reviewer, utilizing the teachings of the present invention, may conveniently provide comments, reviews or opinions pertaining to multiple books.

10 **Figure 6** shows an interface sequence 100, according to an exemplary embodiment of the present invention, that may be implemented by the auction facility 10 for the purposes of harvesting feedback (or comments, opinions or reviews) from users of the auction facility 10. The auction facility 10 may, in one embodiment, only permit a user to provide feedback

15 pertaining to a transaction within which that user wants a participant and which has been established or completed. For example, a transaction may be established through the identification of the winner of an auction, which creates the implicit understanding that the established transaction, between the purchaser (i.e., the winning bidder) and the seller, will be completed by

20 performance of the reciprocal obligations underlying the transaction.

The sequence 100 of interfaces shown in **Figure 6** will be described with reference to the flow chart shown in **Figures 7A and 7B**. Exemplary representations of the various interfaces included with the sequence 100 are

shown in Figures 8 - 12.

On the ending of an auction, and the identification of winning bidder, the auction facility 10, via the e-mail servers 21, issues an end-of-auction e-mail 102 to both the winning bidder and the seller advising both parties of 5 the outcome of the auction, and providing respective contact details to allow the parties to contact each others.

The interface sequence 100 commences with a logon interface 108 through which a user of the facility 10 provides at least a user identifier and associated password. The logon interface 108 may be accessed, in one 10 embodiment, via three mechanisms, namely an end-of-auction e-mail 102, a view item (auction ended) interface 104 or a feedback services interface 106, each of which comprises a markup language document (e.g., HTML document) including a hypertext link to an object (which will be described in further details below) that generates the logon interface 108 as well as 15 further interfaces of the sequence 100. The end-of-auction e-mail 102, as noted above, is communicated by the e-mail servers 21 of the auction facility 10 to both a winning bidder and a seller upon the end of the auction process, the e-mail 102 notifying respective parties about the end of the auction and also providing contact details. The view item (auction ended) interface 104 20 is presented to a user, at conclusion of an auction, when seeking further information regarding the item that was the subject of the auction. For example, upon conclusion of an auction, a textual description of the subject of the auction may be hypertext linked to generate the interface 104. The

feedback services interface 106 may be accessed, for example, through a site navigation menu or toolbar that presents the option to a user of leaving feedback. The feedback services interface 106 is typically used to leave feedback where a user does not know the item number identifying an item

- 5 or where a user wishes to view feedback concerning multiple auctions within which t user has been a participant within a predetermined period of time (e.g., the past 60 days).

The interface 108, and subsequent interfaces 110 - 116, are generated by a collection of objects (or methods), exemplary embodiments of which are 10 illustrated in **Figure 14**. Specifically, a logon interface 108 is generated by a "LeaveFeedbackToMultipleUsersShow" object 118. The object 118 is also responsible for generating a "threshold exceeded" multiple feedback interface 110, a filtered multiple feedback interface 112, a "does not exceed threshold" feedback interface 114 and a confirmation interface 116, as will be 15 described in further detail below. To this end, the object 118 issues calls to a "LeaveFeedbackToMultipleUsers" object 120 that is responsible for actually recording feedback inputted via the interfaces 108 - 116 to the database 23, and specifically the feedback and feedback details tables 52 and 53. The object 118 also issues calls to a "GetSellerListForFeedback" object 122 that 20 retrieves a list of sellers and items from the transaction record table 60, for a clearing user identified by a specific user identifier. The object 122 includes a "UserItemRecord" vector 126 that is used as a container for the retrieved user and item information, the contents of the vector 126 being released to

the object 118.

The object 118 similarly issues a call to a "GetBidderListForFeedback" object 124 that retrieves a list of bidders and items from the transaction record table 60 of the database 23 where the bidders have both items from a 5 specific user identified by an inputted user identifier. The object 124 similarly uses the "UserItemRecord" vector to pass bidder and item information to the object 118.

The interfaces 108 - 116 will now be described within the context of a method 128, according to one embodiment of the present invention, of 10 harvesting feedbacks, comments or opinions regarding multiple items from users of a network-based transaction facility. The method 128 is illustrated by the flow chart indicated in **Figure 7A** and **7B**.

The method 128 commences with a logon confirmation operation at block 130 performed utilizing a user identifier and a password. Specifically, 15 the logon interface 108, an exemplary embodiment of which is illustrated in **Figure 8**, provides a user identifier field 180 and password field 182 into which a user may enter a user identifier and password to enable the logon confirmation operation at block 130. The logon interface 108 illustrated in **Figure 8** also includes a further target user identifier field 184, into which a 20 commentator user (identified by the user ID entered into fields 180) can specify the user identifier of a further user to which the feedback, or comments, are applicable. An item number field 186 also allows a commentator user 186 to specify a specific item number (e.g., identifying an

auction) if the feedback that the commentator user wishes to leave is to be directed towards a specific item. Input into the fields 184 and 186 is optional, and may function as filter criteria so that only a limited number of information items are presented in a subsequent multiple feedback interface.

5 Returning to **Figure 7A**, at block 132, the object 118 issues calls to the "GetSellerListForFeedback" object 122 and the "GetBidderListForFeedback" object 124 to retrieve a list comprising multiple completed transactions for which the commentator user was either a successful bidder or seller. The objects 122 and 124 retrieve the relevant transaction information from the
10 transaction record table 60 of the database 23, and only retrieve transaction records for which no feedback has been left and which were established within a predetermined time period (e.g., the past 60 days). To this end, the objects 122 and 124 may identify records within the transaction record table 60 for which the feedback column 73 indicates that no feedback has been left,
15 and transaction records for which date information included within the end date column 64 identifies the transaction has been established within the predetermined time period.

In one embodiment, the predetermined time period may be a default value that is automatically specified. In an alternative embodiment, a "time frame" input field may be provided within the logon interface 108, utilizing
20 which a commentator user may specify the predetermined time period.

At decision box 134, the object 118 makes a determination as to whether more than a predetermined number (e.g., 25) transaction records

are retrieved from the transaction record table 60 at block 132. Following a positive determination at decision box 134, at block 136, the object 118 retrieves a first template (e.g., an ISAPI page) that provides for pagination and includes a filter field, as will be described in further detail below.

5 Following a negative determination at decision box 134, the object 118 retrieves a second template (e.g., an ISAPI page) that, while facilitating pagination, does not provide a filter field.

At block 138, the template retrieved at block 136 or 140 is populated by ISAPI code, utilizing the contents of the "UserItemRecord" vectors 126 returned by the objects 122 and/or 124 to generate a feedback interface (e.g., the multiple feedback interface 110 or 114).

At block 142, the feedback interface generated at block 138 (e.g., HTML code) is communicated, via the Internet 34, to the client program 30 (e.g., a browser) for display.

15 At decision box 144, a determination is made as to whether a filter criterion has been applied to the transaction records by a commentator user. If so, at block 146, the object 118 may issue fresh calls to the objects 122 and 124 to retrieve a modified list of transaction and user information. In an alternative embodiment, the object 118 may simply discard objects (or 20 vectors) previously returned by the objects 122 and 124 that do not meet the filter criteria.

At block 148, feedback information, comments or opinions are received at the auction facility 10 from the client program 30 and specifically

from the relevant interface communicated at block 142. The feedback information may, in one embodiment, include a number of feedback items, each feedback item including date information specifying a date on which the feedback was provided, comment information providing the actual

5 textual content of the feedback, type information indicating whether the feedback is positive, negative or neutral, user identifier information identifying both the commentator and the target (or commentee) users and any other pertinent information. In exemplary embodiments, which are further described below, the feedback interfaces may comprise markup

10 language documents (e.g., HTML pages) that include radio buttons or check boxes that may be utilized to identify whether a feedback item is provided with respect to an underlying information item (e.g., an auction) and that may also be utilized to identify the type of feedback being provided (e.g., positive, negative or neutral).

15 At block 150, the object 118 makes a call to the "LeaveFeedbackToMultipleUsers" object 120 to create multiple instances of the object 120, each object containing the details of each of the feedback items received at block 148. Accordingly, instances of the object 120 may be viewed as containers for each of the feedback items.

20 Proceeding to **Figure 7B**, at decision box 190, a determination is made as to whether any of the feedback has been categorized via the commentator user as being of a negative or neutral type. If so, at block 192, the object 118 generates the confirmation interface 116 (e.g., in the form of an HTML

document) that is communicated from the auction facility 10 to the client program 30. The confirmation interface 116 prompts the commentator user for confirmation regarding any negative or neutral comments. At decision box 194, a determination is made as to whether all negative or neutral

5 feedback comments have been confirmed. If not, the unconfirmed feedback
is deleted at block 196. Following a positive determination at decision box
194, or following a negative determination at decision box 190, or following
completion of block 196, the method proceeds to block 152, where the object
118 issues an ISAPI call to an error_check function (not illustrated) that
10 comprises a kernel module, and that performs a number of checks with
respect to each feedback item, embodied within an instance of the object 120.
For example, the error_check function may determine whether the
commentator, or target, user has been suspended from the auction facility
10, whether feedback has already been submitted for the respective
15 transaction, whether the commentator user has been a member of the
auction facility 10 for less than predetermined time (e.g., five days) or
whether a reserve price has been met for the relevant item (or transaction) to
which the feedback comment pertains. If any of the conditions embodied
within the error_check function are not met, the relevant feedback comment
20 is deleted, for example by deleting the instance of the object 120 embodying
the feedback comment.

At block 154, ISAPI calls are issued from each of the objects 120 to populate the database 23, and more specifically the feedback table 52 and the

feedback details table 53, with the information contained in the instances of the objects 120, which operation is then actually performed at block 156. The method 128 then ends at block 158.

Having now described server-side operations with respect to **Figures 5** **7A** and **7B**, a description is now provided of an exemplary method 200 of displaying a user interface to harvest feedback, comments or opinions pertaining to multiple items (e.g., transactions). The method 200 shall be described within the context of the interfaces 110, 112 and 114 illustrated in **Figure 6** and with reference to a flowchart illustrated in **Figure 9**.

As stated above with respect to **Figure 7A**, at block 142, a server may communicate a feedback interface over the communications network to a client program 30 (e.g., a browser) for display. Accordingly, the method 200 commences at block 202 with the receipt of a feedback interface in the form of a markup language document. The feedback interface may be, depending on the number of transactions, the "exceeds thresholds" multiple feedback interface 110 or the "does not exceed threshold" multiple feedback interface 114. The feedback interface, in one embodiment, comprises a markup language document (e.g., an HTML document).

At block 204, the client program 30 then proceeds to display transaction identifier information for a plurality of transactions within a single interface. **Figure 10** provides an exemplary embodiment of the "exceeds threshold" multiple feedback interface 110, and the transaction identifier information is shown to include user identifier information 230,

identifying the other party (e.g., the winning bidder or the seller) involved in the transaction, an item identifier providing an item number (or code) identifying the subject matter of the transaction, an item description 234 providing an alpha-numeric description of the subject of the transaction, 5 ended date information 236, indicating the date on which the transaction was established through the ending of the auction process.

At block 206, a feedback input field 238 is displayed to indicate an association between the input field and the transaction identifier information. For example, referring again to the exemplary feedback interface 110 shown in **Figure 10**, a feedback input field 238 is displayed on the interface 110 adjacent the transaction identifier information. The feedback input field 238 can receive both textual and numeric input. In an alternative embodiment, a drop-down menu may be provided to input one of a selected set of comments into the feedback input field 238.

15 At block 208, the interface then receives user-inputted feedback information (e.g., comments or opinions) via the feedback input field 238. This feedback may be provided by an alpha-numeric input device, such as a keyboard, or by voice recognition software. In an alternative embodiment of the invention, the input field 238 may be replaced by a voice recording mechanism that allows the commentator user to leave voice feedback by initiating a recording process.

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At block 210, the method 200 displays a type input mechanism adjacent the identifier information for each transaction, the type input

mechanism allowing a commentator user to specify type information (e.g., positive, negative or neutral) feedback for the relevant transaction.

Referring again to **Figure 10**, an exemplary feedback type input 240 is shown to include three radio buttons, one of which is selectable to identify the input
5 into the feedback input field 238 as being positive, negative or neutral.

Accordingly, at block 212, the interface 110 receives user-inputted type information via the feedback type input 240.

At block 214, the method 200 displays a "skip" input 242, in the exemplary form of a radio button or check box, adjacent the identification
10 information for each transaction displayed within the interface. **Figure 10** shows an exemplary skip input 242 comprising a radio button that is user-selectable to indicate that the commentator user does not wish to provide feedback regarding the relevant transaction. In an alternative embodiment, a check box may be provided to allow user indication that no feedback is
15 being provided.

As is well known in the art, within HTML a check box or radio button is defined by TYPE, NAME and VALUE specifiers, where the TYPE specifier specifies either a check box or a radio button, the NAME specifier specifies a variable where a return value will be stored and the VALUE specifier stores
20 what will be returned in the variable if the check box is checked, or the radio button is selected. Accordingly, feedback type and skip indications may be communicated from the interface 110 in pairs to an ISAPI function implemented by the objects as described above. Each information pair may

comprise, for example, a name and a value.

At block 216, the interface 110 receives the user inputted skip information (or identification) via the skip input 242.

At decision box 218, a determination is made as to whether the user

5 selects a "submit" button to communicate the information inputted via the interface 110 to the server side. If not, the method 200 loops through blocks 204 - 216. Alternatively, if the user does select the "submit" button at decision box 218, field identifier and field content information (e.g., feedback, type information and skip information) is communicated in pairs

10 from the client program 30 to the server side. The method 200 then ends at block 222.

User Interfaces

Further descriptions of exemplary user interfaces will now be

15 described with reference to **Figures 10 - 13**. While the exemplary interfaces are described as comprising markup language documents displayed by a browser, it will be appreciated that the described interfaces could comprise user interfaces presented by any Windows® client application or stand-alone application, and need not necessarily comprise markup language

20 documents.

Figure 10, as described above, illustrates an exemplary "exceeds threshold" feedback interface 110 that provides a predetermined maximum number (e.g., 25) of discrete feedback windows 244, each window 244 being

dedicated to a specific one of a number of transactions or items. Each feedback window 244 includes transaction (or item) identification information, a feedback type input 240, a feedback skip input 242 and a feedback input field 238. Accordingly, a collection of feedback windows 5 244, all displayed in a single interface 110, allow a commentator to provide feedback pertaining to multiple transactions or items in a convenient manner without having to advance through a series of distinct interfaces.

The number of feedback windows 244 displayed in a single interface is limited (e.g., 25), and accordingly the interface 110 provides retreat and 10 advance buttons 246 and 248 that allow a commentator user to retreat to a previous collection of feedback windows 244, or advance to a subsequent collection of feedback windows 244.

The "exceeds threshold" feedback interface 110 furthermore includes a filter criteria input field 250, into which a commentator user may input a 15 user identifier, or item number, to limit the number of transactions, or items, pertaining to which feedback is to be submitted. For example, where the number of transactions for which the commentator may leave feedback exceeds a predetermined threshold (e.g., 50), the filter allows a commentator user to reduce the number of transactions by specifying only transactions 20 involving a particular user or pertaining to a specific item. In alternative embodiments, the filter criteria may comprise a keyword on which a search is done to locate any transactions for which the descriptions contain relevant keywords. The filter mechanism underlying the filter criteria input field 250

allows a commentator user conveniently to limit the number of feedbacks displayed within an interface, and also conveniently to identify specific transactions for which the commentator user wishes to leave feedback.

To this end, **Figure 11** illustrates an exemplary filtered multiple feedback interface 112 that may follow the "exceeds threshold" feedback interface 110 following filtering of the transactions presented in the interface 110.

Figure 12 illustrates an exemplary "does not exceed threshold" feedback interface 114, which is substantially similar to the filtered multiple feedback interface 112, but does not include the retreat and advance buttons 246 and 248. It will also be noted that the interface 114 does not provide a filter criteria input field 250.

Figure 13 illustrates an exemplary embodiment of the confirmation interface 116, described above with reference to **Figure 6**.

In summary, it will be appreciated that the above described interfaces, and underlying technologies, provide a convenient vehicle for the inputting of feedback, comments or opinions regarding multiple items, or transactions, via a single user interface.

Figure 15 shows a diagrammatic representation of a machine in the exemplary form of a computer system 300 within which a set of instructions, for causing the machine to perform any one of the methodologies discussed above, may be executed. In alternative embodiments, the machine may comprise a network router, a network

switch, a network bridge, Personal Digital Assistant (PDA), a cellular telephone, a web appliance or any machine capable of executing a sequence of instructions that specify actions to be taken by that machine.

The computer system 300 includes a processor 302, a main memory 304 and a static memory 306, which communicate with each other via a bus 308. The computer system 300 may further include a video display unit 310 (e.g., a liquid crystal display (LCD) or a cathode ray tube (CRT)). The computer system 300 also includes an alpha-numeric input device 312 (e.g. a keyboard), a cursor control device 314 (e.g. a mouse), a disk drive unit 316, a signal generation device 320 (e.g. a speaker) and a network interface device 322.

The disk drive unit 316 includes a machine-readable medium 324 on which is stored a set of instructions (i.e., software) 326 embodying any one, or all, of the methodologies described above. The software 326 is also shown to reside, completely or at least partially, within the main memory 304 and/or within the processor 302. The software 326 may further be transmitted or received via the network interface device 322. For the purposes of this specification, the term "machine-readable medium" shall be taken to include any medium that is capable of storing or encoding a sequence of instructions for execution by the machine and that cause the machine to perform any one of the methodologies of the present invention.

disks, and carrier wave signals.

Thus, a method and system for harvesting feedback information, comments, and opinions regarding multiple items from users of a network-based transaction facility have been described. Although the present invention has been described with reference to specific exemplary embodiments, it will be evident that various modifications and changes may be made to these embodiments without departing from the broader spirit and scope of the invention. Accordingly, the specification and drawings are to be regarded in an illustrative rather than a restrictive sense.

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